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CLAIMS

We claim:

1. A method of operating an intrusion detection system, the method comprising the steps of:

taking a base action in response to detecting an intrusion;

updating an action counter in response to taking the base action;

comparing the value of the action counter to an action threshold;

updating an action variable when the value of the action counter meets the action threshold;

checking a validity condition for satisfaction dependent upon the action variable; and

invoking a provision associated with the validity condition when the validity condition is satisfied.

- 1 2. The method of claim 1, wherein the provision changes an element of a base intrusion set.
- 2 3. The method of claim 2, wherein the element of the base intrusion set is a signature event.
- 1 4. The method of claim 2, wherein the element of the base intrusion set is a signature event
- 2 counter.
 - 5. The method of claim 2, wherein the element of the base intrusion set is a signature threshold.
 - 6. The method of claim 2, wherein the element of the base intrusion set is a base action.
 - 7. The method of claim 2, wherein the element of the base intrusion set is a weight.
- 1 8. The method of claim 1, wherein the provision changes an element of an action set.
- 9. The method of claim 8, wherein the element of the action set is an action counter.

- 1 10. The method of claim 8, wherein the element of the action set is an action threshold.
- 1 11. The method of claim 8, wherein the element of the action set is an action variable.
- 1 12. A method of operating an intrusion detection system, the method comprising the steps of:
- detecting a signature event;

updating a signature event counter responsive to detecting the signature event;

comparing the value of the signature event counter to a signature threshold;

updating an action counter when the value of the signature event counter meets the signature threshold;

- comparing the value of the action counter to an action threshold;
- updating an action variable when the value of the action counter meets the action
 threshold;
- 10 checking a validity condition for satisfaction dependent upon the action variable; and

- invoking a provision associated with the validity condition when the validity condition is
- 2 satisfied.

- 1 13. The method of claim 12, wherein the provision changes an element of a base intrusion set.
- 1 14. The method of claim 13, wherein the element of the base intrusion set is a signature event.
- 15. The method of claim 13, wherein the element of the base intrusion set is a signature event counter.
 - 16. The method of claim 13, wherein the element of the base intrusion set is a signature threshold.
 - 17. The method of claim 13, wherein the element of the base intrusion set is a base action.
- 1 18. The method of claim 13, wherein the element of the base intrusion set is a weight.
- 1 19. The method of claim 12, wherein the provision changes an element of an action set.

- 1 20. The method of claim 19, wherein the element of the action set is an action counter.
- 1 21. The method of claim 19, wherein the element of the action set is an action threshold.
- 1 22. The method of claim 19, wherein the element of the action set is an action variable.